C. FINDINGS OF FACT

Based upon the evidence in this case, I make the following Findings of Fact:

1. The Petitioners are registrants under FIFRA.

2. The registrations involved here were properly issued under FIFRA.

3. Notices of cancellations by PR Notices 71-1; 71-3; and 71-5 were authentically issued on the dates stated thereon, and applied to the registrations involved herein.

4. The Petitioners filed objections to the pertinent notices of cancellation and requested a public hearing within 30 days following receipt thereof.

5. The parties were represented by legal counsel of their choice during the proceedings herein.

6. The parties had all reasonable opportunity to offer and to present all evidence, oral and written, which would be relevant and material to the issues involved here.

7. The subject matter of this proceeding is DDT, an economic poison under FIFRA.

8. Technical DDT [1, 1, 1 - trichloro - 2, 2 - bis (p-chlorophenyl) ethane] is composed of approximately 75% p, p' - DDT isomer and 20% o, p' - DDT isomer and 5% other isomers and other compounds. The active insecticidal ingredient in DDT formulations is the p, p' - DDT isomer; and whose melting point is 108.5° C. The molecular weight of DDT is

354.5 grams; the vapor pressure is 1.0×10^{-7} mm. mercury at 20° C; and its water solubility is approximately 1.2 parts per billion.

9. Under the registrations involved herein DDT is used as an insecticide in combination with other chemical compounds such as toxaphene, methyl parathion, parathion, endrin, guthion, etc.

10. DDT has the property of persistence.

11. The factors affecting persistence of DDT are: (a) chemical structure; (b) formulation; (c) concentration; and (d) soil considerations, viz. (i) type, (ii) organic matter, (iii) rainfall, (iv) temperature, (v) microbial population, (vi) mineral content, (vii) acidity.

12. DDT can be transported from the target area by physical drift, soilbonded run-off with water, and volatilization.

13. DDT is soluble in fat or lipid tissue.

14. DDT is extremely low in acute toxicity to man.

15. DDT is not a safety hazard to man when used as directed.

16. The daily dietary intake of DDT in milligrams per kilogram body weight as computed in the "Market Basket" survey showed a decline from previous years to 0.0004 in 1970.

17. Carcinogenicity studies have been conducted with mice, rats, and some other animals.

18. Some tests of the effect of DDT on humans were conducted with pesticide workers, volunteer-prisoners, and employees in a DDT manufacturing plant.

19. Studies of the effects of DDT on mammalian reproduction were conducted with beagle dogs and rats.

20. DDT can have a deleterious effect on freshwater fish and estuarine organisms when directly applied to the water.

21. DDT is used as a rodenticide.

22. DDT can have an adverse effect on beneficial animals.

23. DDT is concentrated in organisms and can be transferred through food chains.

24. DDT is essential for the uses described in Admission No. 2.

25. The use of DDT in the United States dropped from a peak of 79 million pounds in 1959 to just under 12 million pounds in 1970.

26. The labels involved herein were approved by the appropriate authority under FIFRA.

27. The language on the labels involved herein is in substantial compliance with Interpretation No. 18.